

**DEPARTMENT OF FORESTRY AND  
FIRE PROTECTION**

P.O. Box 944246  
SACRAMENTO, CA 94244-2460  
(916) 653-7772  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)

**BOARD OF FORESTRY AND  
FIRE PROTECTION**

P.O. Box 944246  
SACRAMENTO, CA 94244-2460  
(916) 653-8007  
Website: [www.bofdata.fire.ca.gov](http://www.bofdata.fire.ca.gov)

December 3, 2015

Recovery Team  
National Marine Fisheries Service  
777 Sonoma Avenue, Room 325  
Santa Rosa, California 95404

Subject: Comments on NOAA Fisheries Coastal Multispecies Recovery Plan

Dear Recovery Team Members:

The California Board of Forestry and Fire Protection (BOF) and the California Department of Forestry and Fire Protection (CAL FIRE) appreciate the opportunity to comment on the National Oceanographic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries) Endangered Species Act Coastal Multispecies Recovery Plan for the California Coastal Chinook salmon, Northern California steelhead and Central California Coast steelhead.

The BOF is responsible for developing general forest policies and regulations put forth in the California Forest Practice Rules governing non-federally owned California timberlands. CAL FIRE is the lead agency that regulates timber harvesting activities on over eight million acres of private timberlands in California through the authority of the California Forest Practice Act and Rules. Additionally, CAL FIRE manages their own timberland through the development of timber harvesting plans on eight Demonstration State Forests, totaling approximately 71,000 acres. Together, BOF and CAL FIRE carry out the California Legislature's mandate to protect and enhance the state's forest and wildland resources.

The BOF and CAL FIRE recognize that it is critical to protect and restore riparian and instream habitats for these listed species. The BOF and CAL FIRE support NOAA Fisheries' efforts in developing partnerships for recovery of these critical listed species (Recommendation 1). Both the BOF and CAL FIRE have participated in several different efforts to directly improve riparian and instream habitat or to address potential upslope activities that could impact these habitats. These efforts are briefly described below.

## BOF AND CAL FIRE ACTIONS TO PROTECT SALMONIDS AND ASSIST RECOVERY

To achieve our shared vision of protection, restoration, and recovery of salmonids and their habitats, the BOF and CAL FIRE have previously taken action by developing the following policies and regulations (Recommendation 2):

- **Joint Policy on Pacific Salmon and Anadromous Trout.** This is a joint policy between California Department of Fish and Wildlife and the BOF. The main goals of the policy are to recover salmonid populations to meet delisting, maintain and restore watersheds, retain managed working forests, encourage watershed-scale programs, and contribute to building healthy communities. The joint policy was approved in August 2001 and amended in March 2009.
- **Anadromous Salmonid Protection Rules (ASP)** (14 CCR § 916.9 [936.9, 956.9] – Protection and Restoration of the Beneficial Functions of the Riparian Zone in Watersheds with Listed Anadromous Salmonids). The ASP rules are a set of permanent regulations that replaced the interim Threatened or Impaired Watershed Rules of 2000. These regulations were developed to protect, maintain, and improve riparian habitats in watersheds where state and federally listed anadromous salmonids are present. The rules refined the Class I watercourse and lake protection zone (WLPZ) width and retention requirements, provided protection for Class I flood prone areas and channel migration zones, created greater protection to large Class II watercourses connected to Class I watercourses, and incorporated an alternative site-specific approach active riparian zone management. These rules additionally provide measures for addressing potential sediment delivery in planning watersheds located directly upstream of ASP watersheds.

The ASP rules were designed to maintain and restore riparian ecosystem functions, including:

- Large wood input
- Watercourse shading
- Sediment filtration
- Nutrient input
- Maintenance of streambank and streambed stability
- Maintenance of favorable microclimates for riparian dependent species
- Floodplain function

The ASP rule package was developed over many years with public input from the BOF, CAL FIRE, California Department of Fish and Wildlife, Regional Water Boards, California Geological Survey, NOAA Fisheries, private timberland owners, and environmental stakeholder groups. A scientific review panel was established to provide the most current literature and best available science prior to the development of the rules. The ASP rules were adopted by the BOF in September 2009 and enacted in 2010. CAL FIRE developed a “question and answer” document for practitioners in order to provide additional guidance and clarification

of the rule package, which has been updated once with the modification of the large Class II watercourse regulations in 2013 (Recommendation 3). The following is a link to the ASP guidance document:

[http://calfire.ca.gov/resource\\_mgt/downloads/ASP%20QA%20doc%20with%20revised%20language%2006\\_16\\_14%20\(final%20revision\).pdf](http://calfire.ca.gov/resource_mgt/downloads/ASP%20QA%20doc%20with%20revised%20language%2006_16_14%20(final%20revision).pdf)

The ASP rules also include increased protection of riparian habitats, specifically 14 CCR § 916.9 [936.9, 956.9] of the Forest Practice Rules specifies the operational standards for riparian buffers widths and management. 14 CCR § 916.9 [936.9, 956.9] (v), also known as Section V, allows a Registered Professional Forester (RPF) or landowner to propose site-specific measures for riparian zone management when they differ from those standards and affords the RPF flexibility to propose management that would promote more immediate (short-term) responses that might not occur under the more prescriptive standard rule requirements.. Specifically, a riparian zone can be treated to enhance instream wood loading, structural diversity, habitat complexity, sediment reduction, and nutrient /light input where those functions are limiting to aquatic habitats. It also allows the RPF to exercise discretion when considering the natural range of variability in successional riparian habitat and potential to increase habitat diversity.

Additionally, the BOF established the Section V Technical Advisory Committee (VTAC) to develop at least two pilot projects that use site-specific information and measures to improve riparian habitat beneficial functions. The goal of the pilot projects was to promote rapid short-term habitat improvement with active riparian management in watersheds with listed salmonids. Campbell Global proposed a project (THP 1-13-031 MEN, Mill-Smith THP) to introduce large wood instream at six sites with low wood loading on a tributary to the Ten Mile River. The project was implemented in August 2014 and results of the project are forthcoming. Green Diamond Resource Company has a project in the South Fork Ah Pah Creek (THP 1-13-106 HUM) that is testing if thinning riparian areas to enhance light and nutrient input will improve salmonid production. The company will be monitoring temperature and turbidity, as well as using hemispherical photography to document canopy cover. NOAA Fisheries participated in the review and approval of this project. Another task of the VTAC was to develop a guidance document to aid RPFs and landowners in identifying site-specific riparian projects that can be implemented to improve riparian beneficial functions in areas with listed salmonids. The following is a link to that document (Recommendation 4).

[http://bofdata.fire.ca.gov/board\\_committees/vtac/vtac\\_guidance\\_document/vtac\\_guidancedocument\\_dec21-2012\\_final.pdf](http://bofdata.fire.ca.gov/board_committees/vtac/vtac_guidance_document/vtac_guidancedocument_dec21-2012_final.pdf)

- **The Revised Road Rules** (14 CCR § 923 [943, 963] – Logging Roads, Landings, and Logging Road Watercourse Crossings) are a set of regulations developed to prevent adverse impacts to beneficial uses of water, including cold freshwater habitat and fish spawning, and to functionally organize all of the road-related rules in one location in the California Forest Practice Rules

Adopted by the BOF in 2013 and enacted in 2015, the Road Rules package had been in development since 1999, with all of the same entities from the ASP rule package providing input, including NOAA Fisheries.

Key features of the Road Rules package include requiring logging roads and landings to be hydrologically disconnected where feasible to minimize sediment delivery to streams; requiring RPFs to locate significant erosion sites and mitigate significant adverse impacts. Also, the addition of Technical Rule Addendum No. 5 provides guidance on hydrologic disconnection, road drainage, minimizing diversion potential, and addressing high-risk crossings.

Additionally, the Road Rules package updated existing road and crossing definitions, as well as provided and defined new terms. Hydrologic disconnection is a key term that is defined as the removal of direct routes of drainage or overland flow of road runoff to a watercourse. Agencies, researchers, and landowners all acknowledge that one of the main sources of sediment delivery to streams is hydrologically connected road networks. The Road Rules package attempts to greatly reduce this hydrologic connectivity (Recommendation 5).

Prior to the implementation of the Road Rules, CAL FIRE and the other Review Team agencies delivered a series of seven training workshops that were geographically dispersed throughout the forested parts of California. These workshops provided outreach, guidance, and clarification to RPFs, landowners, Licensed Timber Operators (LTOs), and agencies (Recommendation 6). The presentations can be found under Road Rules, 2013 Rule Package Training Workshop, September 16, 2014 (lone) at the following link:  
[http://calfire.ca.gov/resource\\_mgt/resource\\_mgt\\_forestpractice\\_pubsmemos\\_memos](http://calfire.ca.gov/resource_mgt/resource_mgt_forestpractice_pubsmemos_memos)

CAL FIRE also helped fund a revision of the Handbook Forest and Ranch Roads by Pacific Watershed and Associates. The previous edition of the handbook has been a valuable tool for landowners in building and maintaining roads and crossings. The revision provides contemporary information in road and crossing design as well as useful photos and diagrams. A copy of the handbook can be found here: <http://mcrd.org/publications/>

- **Cumulative Impacts, Technical Rule Addendum.** Currently, the BOF and CAL FIRE are working on revising California Forest Practice Rule Technical Rule Addendum No. 2, Cumulative Impacts, to fully address the potential negative impacts from timber operations. Key topics being discussed include the inclusion of greenhouse gas emissions relative to timber harvesting, and changes to sediment effects, peak flow effects, and late seral habitat. The revision is a public process that is receiving input from the aforementioned government and private entities.

- **BOF Emergency Actions.** When environmental conditions warrant, such as drought conditions as in Governor Jerry Brown's 2014 Drought Emergency Declaration, the BOF is responsive to initiate emergency rule making to ensure adequate stream flows are being maintained for water drafting operations (Recommendation 7).

## COLLABORATIVE SCIENCE-BASED MONITORING AND ADAPTIVE MANAGEMENT

The BOF and CAL FIRE lead and participate in many collaborative monitoring groups and projects that have the main objective of addressing protection and recovery of anadromous salmonids and their habitat. Listed below are key examples of those efforts.

- **The Monitoring Study Group (MSG)** is a BOF Advisory Committee that has been in place since 1990. The MSG meets at least biannually and meetings are publically noticed. The initial purpose of the MSG was to develop a long-term water quality-related monitoring program on the implementation and effectiveness of the Forest Practice Rules, and to provide guidance to CAL FIRE in implementing the program. Under MSG guidance, CAL FIRE has funded numerous monitoring projects to determine if the rules are effective in protecting the beneficial uses of water. These projects include the Hillslope Monitoring Program, Modified Completion Report Monitoring, Interagency Mitigation Monitoring Program, and Forest Practice Rules Implementation and Effectiveness Monitoring (FORPRIEM). Final reports for these projects are posted on the MSG website, as are numerous supported monitoring projects (see:

[http://bofdata.fire.ca.gov/board\\_committees/monitoring\\_study\\_group/](http://bofdata.fire.ca.gov/board_committees/monitoring_study_group/)

[http://bofdata.fire.ca.gov/board\\_committees/monitoring\\_study\\_group/msg\\_monitoring\\_reports/](http://bofdata.fire.ca.gov/board_committees/monitoring_study_group/msg_monitoring_reports/)

Currently, with the establishment of the Effectiveness Monitoring Committee in 2014, the MSG functions as an information sharing forum for entities conducting water quality-related monitoring.

**The Effectiveness Monitoring Committee (EMC)** is a BOF Advisory Committee that was established in 2014 to develop and implement an effectiveness monitoring program to address both watershed and wildlife concerns, and to provide an improved feedback loop to policy makers, managers, agencies, and the public. It will use science-based approaches to determine if the California Forest Practice Rules and other natural resource protection statutes and laws, codes, and regulations (including state and federal Endangered Species Acts) are effective in protecting natural resources. One goal is to recommend monitoring to evaluate how effective the current California Forest Practice Rules are in restoring and maintaining habitat, including riparian and instream habitats. An additional goal is to ensure that the process is consistent with natural resource protection statutes and laws, as well as conveying the information to the public and scientific communities. NOAA Fisheries has a representative that is a member of the committee. High priority questions the

questions the EMC has chosen to investigate in the Strategic Plan include the effectiveness of: riparian protection in maintaining canopy closure and water temperature, road rules in minimizing sediment discharge and delivery, and riparian and instream protection in maintaining foraging, rearing, and spawning habitat for anadromous salmonids and other aquatic species (Recommendations 8 and 9).  
[http://bofdata.fire.ca.gov/board\\_committees/effectiveness\\_monitoring\\_committee/](http://bofdata.fire.ca.gov/board_committees/effectiveness_monitoring_committee/)

- **Wood for Salmon Working Group (WFSWG).** CAL FIRE, along with NOAA Fisheries, is an active participant in the Wood for Salmon Working Group, which is a collaborative ad hoc group of state, federal, and non-governmental partners that was formed in 2010. The mission of the group is to “promote recovery actions described in state and federal salmonid recovery plans by accelerating the pace and scale of instream restoration projects, especially large wood enhancement.” The goal of the group is to understand and identify mechanisms to simplify the regulatory processes, as well as incentivize wood placement projects for salmonid habitat restoration. CAL FIRE has helped fund wood enhancement projects in the Garcia and Gualala River watersheds, and implemented wood placement projects on Soquel Demonstration State Forest and Jackson Demonstration State Forest. The WFSWG has developed a guidance document and flowchart for permitting wood projects (Recommendation 10). For more information see:  
<https://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/california/salmon/woodforsalmon/Pages/default.aspx>
- **Additional Monitoring Efforts.** The BOF and CAL FIRE have been involved and helped fund several additional monitoring efforts, most of which are collaborative, interagency studies. These include the 2011 Battle Creek Task Force project, and several cooperative instream monitoring projects (e.g., Caspar Creek watershed study, Little Creek watershed study, Judd Creek watershed study, Railroad Gulch BMP Evaluation Project). CAL FIRE has provided considerable funding for the Caspar Creek study, which was jointly implemented by the USFS and CAL FIRE in 1962.  
<http://www.fs.fed.us/psw/topics/water/caspar/>

Additionally, BOF and CAL FIRE are currently evaluating the effectiveness and function of stream crossings in the forested portions of the Evolutionary Significant Unit and two Distinct Population Segments (Recommendations 11 and 12).

## FUNDING SOURCES AND GRANT PROGRAMS

CAL FIRE has a number of different grant and landowner incentive programs available to the public. There are specifically two programs that may be used to work towards recovery of salmonid habitat restoration projects for consideration (Recommendation 13).

- **Forest Legacy Program.** The Forest Legacy Act allows CAL FIRE to accept lands and interests in lands and to encourage the long-term conservation of productive forest lands by providing an incentive to private forest landowners to prevent future



conversions of forest land and forest resources through the use of conservation easements. The purpose of these easements is to keep these forests intact to provide such benefits as timber production, wildlife habitat, watershed protection and/or open space. These forests remain in private ownership, except for the restrictions on development or other uses conveyed by the conservation easement to the agency selected by the forest landowner. For more information see:

[http://calfire.ca.gov/resource\\_mgt/resource\\_mgt\\_forestryassistance\\_legacy](http://calfire.ca.gov/resource_mgt/resource_mgt_forestryassistance_legacy)

- **Greenhouse Gas Reduction Fund (GGRF).** CAL FIRE has received funding from the GGRF for forestry projects which reduce or avoid GHG emissions to improve forest health, reforest degraded lands, and conserve forestland by avoiding conversion to other uses, among other objectives.

The goal is to ensure California's forests continue to be significant carbon storage "sinks" and to reduce or avoid GHG emissions due to pest damage, wildfires, and loss of forest tree cover from development to non-forest uses. To meet these goals, CAL FIRE will issue grants, cost share agreements, expand technical forestry assistance, conduct research, and implement projects. Grants can be issued to public agencies, non-profit organizations, Native American Tribes, and landowners for projects on forestlands. For more information see:

[http://calfire.ca.gov/resource\\_mgt/GGRF](http://calfire.ca.gov/resource_mgt/GGRF)

## RECOMMENDATIONS

The BOF and CAL FIRE offer the following comments and recommendations to the document in reference to specific items in this letter, as well as additional recommendations not previously referenced:

1. Given the collaborative work in developing regulations and participating in multiagency monitoring programs, the BOF and CAL FIRE should be listed among the agencies under State and Local Partners in the Vol I, 7.2.1, page 205 in addition to being listed as a recovery partner for numerous ESU Recovery Actions.
2. NOAA Fisheries has been a participant and commenter in developing many rule packages put forth by the BOF. The BOF and CAL FIRE request that NOAA Fisheries recognize these improvements and strides, specifically with the development of the ASP and Road Rules, the Board and CAL FIRE have undertaken to improve riparian and instream habitat and watershed conditions within the footprint of non-federal timberland operations. Recovery Actions for all species, Action ID 19.2.
3. Page 123 of Volume II and Page 133 of Volume III refer to regulatory mechanisms for land management and provide a citation to the Anadromous Salmonid Protection Rules, however when referring to the specific reference it points to the

ASP Q&A document. Please provide a reference to the actual regulatory language in the California Forest Practice Rules, 14 CCR § 916.9 [936.9, 956.9].

4. The BOF and CAL FIRE support NOAA Fisheries Recovery Actions through the implementation of Section V and other permits for all species in Action IDs 6.2.1.2 and 19.2.1.4.
5. With respect to the California Forest Practice Rules, the BOF and CAL FIRE believe that Article 12. Logging Roads, Landings, and Logging Road Watercourse Crossings CCR §923 – 923.9.1 and Board of Forestry Technical Rule Addendum 5: Guidance on Hydrologic Disconnection, Road Drainage, Minimization of Diversion Potential, and High Risk Crossings meet the objectives of Recovery Actions for all species in Action IDs 23.1.1.2, 23.1.1.3, and 23.1.1.4.
6. The series of Road Rule regulation workshops hosted by CAL FIRE with the participation of other State agencies achieves, in part, the objective of Recovery Actions for all species in Action ID 23.1.1.5.
7. BOF emergency actions can play a role in addressing low flows at the time when water demands are critical for listed salmonids. Additionally, the cumulative impacts proposed regulatory package is working towards addressing low flow operations. The BOF and CAL FIRE recommend including these efforts in Vol 1, Chapter 2.7.1, page 55.
8. The BOF and CAL FIRE agree with the high monitoring priority identified in Vol I, Chapter 6.0, page 155 to monitor freshwater habitat conditions. We encourage NOAA Fisheries to continue active participation in the BOF Effectiveness Monitoring Committee (EMC), which also identified this subject as a critical monitoring question. We also encourage NOAA Fisheries to work with the BOF EMC to collaboratively develop habitat monitoring protocols (Vol I, Chapter 6.5.1, Page 189), as well as developing a statewide salmonid watershed database (Recovery Actions for all species in Action ID 19.1.1.4).
9. When describing timber harvesting or road practices, the Recovery Plan needs to better separate historic or legacy impacts from contemporary practices, as has been recognized by the BOF and EMC. Action ID 23.1.1.1 for all species appears to recognize the level of protection provided by the newly enacted Road Rules package provides. The BOF and CAL FIRE request that NOAA Fisheries acknowledge these improvements in the Executive Summary and in Volume I of the Recovery Plan.
10. CAL FIRE recommends NOAA Fisheries include a discussion on the Wood for Salmon Working Group in Volume I, Chapter 7 Resources in Recovery as well as including the group in Recovery Actions for all species in Action IDs 6.2.1.2 and 19.2.1.4, similar to Recommendation 5.



11. Before beginning new or additional Best Management Practices monitoring, the BOF and CAL FIRE encourage NOAA Fisheries to work collaboratively with the EMC on monitoring road crossings. Please include the BOF and CAL FIRE as a Recovery Partner in the Recovery Actions for all species in Action ID 8.1.1.2.
12. The BOF and CAL FIRE encourage NOAA Fisheries to work collaboratively to review the results of previous and existing BMP monitoring efforts and develop new monitoring protocols and studies through the BOF EMC (See Vol I, Chapter 6.5.4, Page 194).
13. To build on available funding opportunities, please consider including the Forest Legacy Program and Greenhouse Gas Reduction Fund as possible monetary resources in Funding, Permitting, and Partnerships, Vol I, 7.2.1, Page 203.
14. The BOF and CAL FIRE are committed to outreach and education, as well as remaining current on best available science and monitoring. For Recovery Actions for all species in Action IDs 11.1.1.4 and 11.1.1.5, please include the BOF and CAL FIRE as Recovery Partners.
15. The BOF and CAL FIRE share concerns with NOAA Fisheries regarding the impacts from illegal marijuana cultivation (Vol III, page 14). Regulating and managing marijuana cultivation, while not specifically a land management issue, is nevertheless critically important in the effort to minimize environmental damage resulting from illegal grow operations.
16. The BOF and CAL FIRE agree with implementation measure 8.2.6 identified on Page 216 Vol. I. Section 8.0 -- For Habitat Conservation Plans (HCPs) *Develop strategies to identify potential focus areas to increase the number of HCPs and Safe Harbor Agreements (e.g., key watersheds, activities amenable to consolidated landowner application such as forestry, water diverters and target increased participation, etc.); and streamline the HCP process for landowners implementing recovery plan priorities.*
17. The BOF and CAL FIRE support NOAA Fisheries recovery actions that *discourage counties from rezoning forestland or identified TPZ areas to rural residential or other land uses (e.g. vineyards)(Volume II, Page 73).*
18. Recovery Action for all species, Action ID 19.1.1.1 encourages the development of HCP/Natural Community Conservation Plans (NCCP). BOF and CAL FIRE invite NOAA Fisheries to address the BOF on how the NCCP's could work and potential funding for these plans in certain watersheds or regions.

Again, thank you for the opportunity to comment on the Multispecies Recovery Plan. The BOF and CAL FIRE appreciate and support efforts to aid in the recovery of the state's listed anadromous salmonids and their habitat, and look forward to successful partnerships with NOAA Fisheries. CAL FIRE and the BOF recognize that it is critical to improve instream habitats for these listed fish species rapidly to prevent extinction of these fish.

If you have any questions or comments regarding this letter, please contact CAL FIRE's Senior Environmental Scientist, Stacy Stanish, at [anastasia.stanish@fire.ca.gov](mailto:anastasia.stanish@fire.ca.gov) or 916-616-8643 or the BOF's acting Executive Officer, Matt Dias at [matt.dias@BOF.ca.gov](mailto:matt.dias@BOF.ca.gov), or 916-653-8031.

KEN PIMLOTT  
Director  
California Department of Forestry and  
Fire Protection

J. KEITH GILLESS  
Chair  
California Board of Forestry and Fire  
Protection